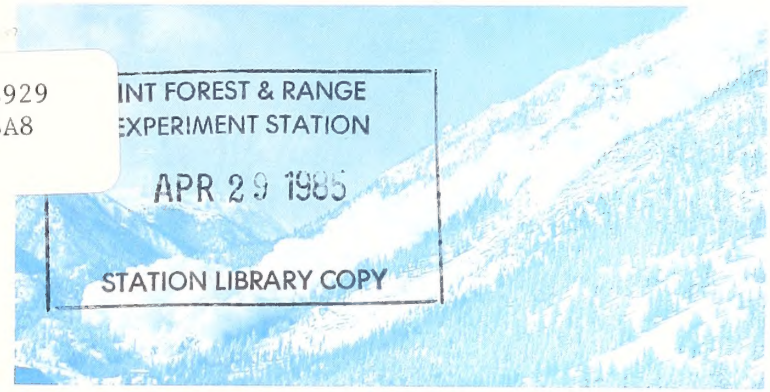

Avalanche Notes

U.S. Forest Service
Westwide Avalanche Network

March 1985

March brought heavy snows to Alaska, the Sierra of California, and much of the Intermountain area. Alyeska, AK recorded 135% of normal snows, and Eaglecrest, AK had a persistently snowy month. At Alyeska, a heavy storm dumped 55 inches on the 16th-19th. The Sierra saw two heavy storms, enough to bring Alpine Meadows 200%, Squaw Valley 200%, and Mammoth Mtn. 150% of normal snows for the month. A storm on the 6th-7th dropped 35-46 inches, and another on the 27th-28th left 39-44 inches. In the Intermountain area, Jackson Hole, WY recorded 99% of normal snowfall; Alta, UT, 108%; Sun Valley, ID, 110%; and Bridger Bowl, MT, 125%.

The Cascades of Washington and Oregon lay in between storm tracks and came up with mostly below-average snows. Stevens Pass recorded 59% of normal and Crystal Mtn., 71%. Mt. Rainier, however, caught generous snows from the 21st-31st and achieved 119% of normal.

The Colorado Rockies showed a wide variety of snowfall amounts. In the northern portion, Copper Mtn. (78%) and Winter Park (87%) were on the dry side, while Berthoud Pass, Breckenridge, Loveland, and Vail all came in with 95-105% of average. Farther south, Aspen recorded 92% of normal, but all other sites were above normal: Monarch, 120%; Crested Butte, 140%; and Wolf Creek, 140%. Wolf Creek caught March's biggest storm and recorded 66 inches on the 27th-30th. In New Mexico, Taos totalled 110% of normal snowfall.

There were three fatal avalanche accidents in March, and one in February that went unreported in last month's Avalanche Notes. On February 12, at the town of Roberts, MT, three boys -- 7-9 years old -- were sledding on the steep slope above a creek when the snow fractured at the top and buried two of the boys. The third ran for help. One victim was uncovered after about 25 minutes from 3-4 feet of snow. He was unhurt. The second boy was uncovered after about 45 minutes from 4-5 feet of snow. He was hospitalized in critical condition and died 9 days later. On March 2 three snowmobilers were caught in a slide at Hatcher Pass, AK. One was partly buried and dug himself out. A second was buried head down with one foot on the surface. Rescuers dug him out, unhurt. The third was not found until 4 hours later when a probe team struck his body about 10 feet beneath the surface. He was dead when uncovered. On March 19 at Park City, UT, two skiers released a slide on a closed slope which flowed onto an open slope where spectators had been watching a World Cup race. One of the two skiers was buried, but was dug out quickly without serious injury. A second victim was a woman spectator who, according to newspaper accounts, skied next to an embankment where she lay down. She was uncovered in 20 minutes, hospitalized, and died the following day. On March 24 near Berthoud Pass, CO, three ski tourers were caught in a hard slab avalanche. Two were partly buried, and one was completely buried.

A probe team located his body 3 feet deep, 3 hours later. He did not respond to resuscitation efforts.

Two other victims suffered broken bones in March -- a heli-ski guide in Utah broke ribs on the 4th, and a ski tourer near Ashcroft, CO broke an ankle on the 13th. The season's avalanche statistics thru March are tabulated below.

Total Avalanches Reported — Damage Summary - This Winter

Area	This month	This winter	People C	B	I	K	Vehicles B	D	Avalanche Damaged Bldgs	Lifts	Misc
Central and So. Rockies	552	2252	40	14	2	5	4	0	3	0	0
Intermountain	334	1476	28	15	5	5	0	0	0	0	0
West Coast	981	2840	38	8	8	2	4	0	0	0	2
All Areas	1867	6568	106	37	15	12	8	0	3	0	2

U.S. FOREST SERVICE
ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
RM STATION FORT COLLINS, COLO.

MARCH 1985

SUMMARY OF WEATHER AND SNOW CONDITIONS

AREA	SNOWFALL				WATER EQUIVALENT			NUMBER OF DAYS				SNOW DEPTH				TEMPERATURE			WIND SPEED AND DIRECTION					
	TOTAL SNOW-FALL IN.	AVG DEP	MAX IN 24 HR. IN.	DATE	TOTAL WATER IN.	MAX IN 24 HR. IN.	DATE	GE .1	GE .2	GE .5	GE 1.0	MAX IN.	DATE	MIN IN.	AVG IN.	MEAN MAX DEGREES F	MEAN MIN DEGREES F	AVG FOR MO. MPH	6 HOUR PERIODS GE 15	GE 20	FASTEST HOUR MPH	DIR.	DATE
CENTRAL AND SOUTHERN ROCKY MOUNTAINS																								
ARAPAHOE BASIN, COLO	50.0	--	6	15	--	--	--	--	--	--	--	79	31	67	73	28.6	7.1	17.8	--	--	--	--	--	--
ASPEN HIGHLANDS, CO	63.1	.06	17	28	5.05	1.40	28	11	10	3	1	77	28	58	63	35.1	15.6	25.3	--	--	--	27	140	29
ASPEN MOUNTAIN, COLO	49.0	.12	16	28	5.81	2.00	28	10	9	5	1	72	28	54	59	30.9	14.7	22.8	10.5M	33M	13M	36	300	31
BEAR LAKE, RMNP, CO	42.4	.08	7	29	3.58	.57	11	13	10	2	0	50	31	36	40	28.1M	16.6	22.4M	--	--	--	--	--	--
BEAVER CREEK, COLO	64.5	.07	13	26	4.74	.95	28	11	7	4	0	94	31	72	83	29.5	12.0	20.7	11.5	55	23	50	160	29
BERTHOUD PASS, COLO	57.5	.07	13	16	4.23	1.05	11	10	7	2	1	79	13	60	67	30.6	6.8	18.7	15.7	60	35	49	230	27
BERTHOUD-MINES PEAK	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	21.6	84	56	65	310	31
BRECKENRIDGE, COLO	50.8	.08	9	26	3.88	.65	11	13	10	2	0	79	29	61	67	27.8	10.5	19.1	13.9	63	33	55	230	5
COPPER MTN, COLO	40.9	.17	7	29	2.95	.65	28	12	7	1	0	62	31	50	54	30.5	6.7	18.6	15.8M	55M	30M	60	90	28
CRESTED BUTTE, COLO	58.2	.10	15	28	5.75	1.50	28	9	7	6	1	74	29	49	56	31.4	15.0	23.2	--	--	--	--	--	--
GUTHRIE, COLO	71.1	.08	15	28	5.96	1.30	28	11	11	4	1	83	29	60	66	34.1	18.7	21.4	--	--	--	--	--	--
LOVELAND PASS U.S. 6	37.0	.07	9	14	2.65	.65	11	9	5	1	0	54	31	46	50	--	--	--	--	--	--	--	--	--
MARVINE RANCH, COLO	36.0	.09	10	31	3.05	.80	31	6	7	2	0	57	31	36	42	42.4	20.8	26.6	--	--	--	--	--	--
MARY JANE, COLO	60.5	.17	16	15	4.05	1.20	11	8	6	3	1	86	13	67	74	31.9	10.5	21.2	--	--	--	--	--	--
MONARCH, COLO	63.2	.09	19	29	5.39	1.20	29	12	9	5	1	84	29	54	61	28.5	12.0	20.2	23.4	100	86	60	240	27
PURGATORY, COLO	75.7	.07	14	29	5.42	1.20	29	14	11	3	2	104	30	66	79	38.4	11.8	25.1	--	--	--	18	310	6
SUNLIGHT, COLO	62.7	.09	11	28	5.51	1.20	28	11	9	5	1	94	31	60	68	35.9	19.0	27.4	14.7M	49M	38M	44	260	21
TAOS, NEW MEXICO	54.0	.06	16	13	4.57	1.75	13	7	5	3	2	119	21	89	105	29.8	15.1	22.5	11.7M	37M	22M	--	--	--
TELLURIDE, COLO	53.3	--	11	25	--	--	--	--	--	--	--	85	29	57	66	31.1	13.5	22.3	5.1M	3M	1M	--	--	--
VAIL, COLO	69.5	.07	12	11	5.21	1.20	11	11	9	4	2	97	31	77	83	28.9	6.6	17.7	12.2M	45M	26M	53	180	5
WINTER PARK IF, COLO	37.0	.08	10	11	2.86	.86	11	9	5	2	0	56	13	44	47	35.9	9.0	22.4	--	--	--	--	--	--
WOLF CREEK, COLO	129.0	.12	21	28	15.03	3.50	28	12	11	10	7	185	30	113	133	31.6	13.9	22.8	--	--	--	--	--	--
INTERMOUNTAIN																								
ALTA, UTAH	99.5	.09	13	28	9.26	1.26	28	14	12	10	3	111	29	82	92	31.9	18.3	25.1	--	--	--	--	--	--
BIG SKY, MONT	65.0	.09	13	25	5.90	1.31	25	10	8	5	2	80	27	58	68	27.4	11.3	19.4	14.9	60	24	45	190	25
BRIDGER BOWL, MONT	72.7	.08	15	2	5.79	1.25	28	12	9	4	3	118	2	90	105	32.9	15.0	23.9	17.5M	80M	45M	55	120	3
GRAND TARGHEE, WYO	50.1	.07	7	22	3.70	.66	26	10	10	1	0	74	26	58	65	29.3M	13.8M	21.6M	5.1	2	1	27	180	27
JACKSON HOLE 1, WYO	63.5	.09	12	1	5.95	1.05	1	14	12	4	2	104	26	84	92	20.0M	7.7M	13.9M	14.4M	47M	28M	43	300	27
PARK WEST, UTAH	72.8	.08	11	28	5.89	.87	28	14	13	5	0	87	29	60	71	31.7M	13.1	22.4M	12.7M	38M	23M	--	--	--
SNOWBIRD, UTAH	94.0	.08	17	12	7.68	1.65	12	12	12	7	1	111	12	83	94	37.6	16.5	27.1	21.7	99	66	60	300	21
SOLITUDE, UTAH	80.0	--	17	12	--	--	--	--	--	--	--	112	29	82	93	31.8	1.8	16.8	10.2	20	9	30	100	29
SUN VALLEY, IDAHO	31.5	.09	13	27	2.74	1.19	27	7	5	1	1	73	27	54	60	24.9M	14.4M	19.7M	11.3M	30M	10M	--	--	--
TETON PASS, WYO 22	61.5	.08	12	2	4.87	.92	2	10	9	5	0	75	7	56	65	28.1M	13.7M	20.9M	--	--	--	--	--	--
WEST COAST																								
ALPINE MEADOWS, CAL	114.6	.10	24	6	11.94	3.22	27	13	10	6	4	116	28	66	86	36.5	18.7	27.6	18.6	70	52	60	240	4
ALYESKA, ALASKA	130.1	.08	17	16	10.81	1.60	18	17	14	7	3	140	21	94	117	32.5	19.5	25.9	4.4	1	0	26	140	17
CRYSTAL MTN 1, WASH	47.5	.08	11	24	3.72	.69	23	10	5	5	0	74	30	58	64	34.3	18.9	26.6	12.2M	34M	14M	--	--	--
CRYSTAL MTN 2, WASH	61.2	.10	11	24	6.18	1.20	24	12	11	5	2	101	30	81	90	29.6	17.8	23.7	--	--	--	--	--	--
EAGLECREST, ALASKA	85.0	.11	9	12	9.08	1.95	12	19	16	6	1	84	18	57	74	35.9	23.6	29.8	--	--	--	--	--	--
MAMMOTH MTN, CALIF	86.5	.10	22	27	8.78	2.75	27	8	8	4	3	102	29	64	80	31.2	14.5	22.9	--	--	--	--	--	--
MT. HOOD MDWS, ORE.	71.5	--	18	27	--	--	--	--	--	--	--	183	28	139	153	37.5	19.5	28.5	14.8	62	47	90	300	11
MT. RAINIER PARADISE	124.5	.10	17	30	11.85	2.41	30	16	14	9	4	198	31	149	169	35.4	21.2	28.3	4.9	12	1	30	270	29
MT ROSE/SLIDE MT, NV	93.0	--	36	27	--	--	--	--	--	--	--	113	29	75	89	31.5	14.5	23.0	--	--	--	--	--	--
MULTORPOR SKI BWL,OR	45.1	.06	13	27	2.73	.68	27	7	4	2	0	116	30	82	94	39.5	24.5	32.0	8.2M	7M	3M	--	--	--
SNOQUALMIE PASS I-90	60.5	.10	12	23	6.28	1.16	23	11	11	6	1	105	30	81	94	42.2	23.8M	33.0M	6.2	11	9	--	--	--
SQUAW VALLEY, CALIF	87.4	.08	28	27	7.01	2.23	27	9	7	4	3	114	27	77	96	48.2	17.4	32.8	19.2	73	49	57	220	28
STEVENS PASS SE WASH	41.6	.08	10	23	5.09	2.54	31	6	5	2	2	105	30	90	99	39.0M	22.8M	30.9M	4.9M	2M	1M	--	--	--
SUGAR BOWL, CALIF	128.5	--	39	7	--	--	--	--	--	--	--	180	28	117	146	37.1	19.4	28.3	12.7	48	25	50	50	3

-- DATA INCOMPLETE OR MISSING
M-ONE OR MORE DAYS OF RECORD MISSING-IF AVERAGE VALUE IS ENTERED, LESS THAN 10 DAYS RECORD IS MISSING
IF M IS ENTERED IN WIND SPEED COLUMN, LESS THAN 37 6-HOUR PERIODS ARE MISSING
GE--GREATER THAN OR EQUAL TO

U.S. FOREST SERVICE
ALPINE SNOW AND AVALANCHE RESEARCH PROJECT
RM STATION FORT COLLINS, COLO.

MARCH 1985
AVALANCHE SUMMARY

AREA	TOTAL AVALS THIS MONTH NO.	TOTAL AVALS THIS WINTER NO.	DATES OF FIRST	DATES OF LAST	MAX IN ONE DAY NO.	MAX IN ONE DAY DATE	NUMBER OF DAYS WITH AVALS	NUMBER OF DAYS WITH SLUFFS	TYPE OF AVALANCHE: ARTIFICIAL	TYPE OF AVALANCHE: NATURAL	TYPE OF AVALANCHE: SLABS HARD	TYPE OF AVALANCHE: SLABS SOFT	TYPE OF AVALANCHE: SLABS WET	TYPE OF AVALANCHE: LOOSE	FRACTURE LINE HEIGHTS IN FEET: GE 2	GE 4	GE 6	VERTICAL DESCENT IN FEET: GE 200	GE 500	GE 1000	MAX FEET	AVALS ACROSS MAJOR ACCESS ROADS NO.
									-NUMBER-						-NUMBER-			---NUMBER---				
CENTRAL AND SOUTHERN ROCKY MOUNTAINS																						
ARAPAHOE BASIN, COLO	21	95	1	30	6	13	8	1	19	2	0	19	0	2	8	2	0	21	14	5	1300	0
ASPEN HIGHLANDS, COL	43	123	6	30	10	28	11	2	30	13	0	25	14	4	27	2	1	24	10	9	3600	0
ASPEN MOUNTAIN, COLO	2	9	28	29	2	28	1	1	2	0	0	2	0	0	2	0	0	1	1	0	900	0
ASPEN SNO.MASS, COLO	33	168	1	31	7	28+	11	3	25	8	13	20	0	0	21	7	3	28	5	0	750	0
BEAVER CREEK, COLO	4	9	12	28	1	28+	4	0	4	0	0	4	0	0	2	0	0	2	0	0	300	0
BERTHOUD PASS, COLO	24	161	4	29	6	4	10	1	3	21	1	15	1	7	3	1	0	17	10	0	900	0
BERTHOUD PASS U.S.40	3	13	5	22	1	22+	3	0	2	1	1	2	0	0	1	1	0	2	1	1	2500	0
BRECKENRIDGE, COLO	16	96	1	31	5	31	6	1	16	0	7	9	0	0	4	0	0	12	0	0	350	0
COPPER MT, COLO	9	37	3	30	2	9+	7	0	9	0	3	6	0	0	9	3	1	9	2	1	2000	0
CRESTED BUTTE, COLO	32	94	11	30	10	27	9	2	31	1	0	29	0	3	10	2	0	22	7	1	1600+	0
GOTHIC, COLO	58	287	4	31	15	13	12	0	0	58	0	34	0	24	25	1	0	57	48	22	2200	0
LOVELAND BASIN, COLO	13	82	4	23	7	4	4	2	10	3	8	5	0	0	13	0	0	4	0	0	225	0
LOVELAND PASS U.S. 6	44	178	4	29	9	4	10	0	12	32	0	35	2	7	10	1	0	36	17	2	1400	5
MONARCH, COLORADO	6	36	12	29	3	13	3	0	1	5	0	5	0	1	2	0	0	4	0	0	400	3
RED MTN PASS U.S.550	50	264	9	29	20	29	8	1	18	32	0	24	14	12	24	1	1	49	39	20	3320	16
SILVERTON, COLO	1	9	29	29	1	29	1	0	0	1	0	1	0	0	1	0	0	1	1	1	1700	0
STEAMBOAT SPRNGS, CO	1	9	28	28	1	28	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0
SUNLIGHT, COLORADO	11	30	5	31	4	31	5	0	11	0	1	9	0	1	3	1	0	2	0	0	250	0
TAOS, NEW MEXICO	128	371	11	16	80	12	5	0	120	8	3	120	2	3	105	9	3	104	62	4	1250	0
TELLURIDE, COLO	3	6	28	28	3	28	1	0	3	0	0	3	0	0	3	0	0	2	0	0	400	0
URAD MINE, COLO	7	30	4	23	3	5+	3	0	3	4	0	7	0	0	7	2	1	7	7	4	1800	0
VAIL, COLO	4	20	9	11	2	11+	2	0	4	0	0	1	0	3	1	0	0	2	0	0	300	0
WOLF CREEK, COLO	25	58	3	29	9	29	7	0	25	0	1	24	0	0	12	1	0	0	0	0	180	0
WOLF CRK PASS US 160	14	18	9	29	4	11+	6	0	2	12	1	12	1	0	5	2	1	5	5	2	2700	11
INTERMOUNTAIN																						
ALTA, UTAH	51	190	4	31	40	12	4	1	47	4	0	51	0	0	6	0	0	32	13	3	1200	1
BIG SKY, MONT	52	333	2	31	10	28	10	0	29	23	0	44	1	7	14	1	0	40	15	1	1000	0
BRIDGER BOWL, MONT	87	379	1	30	26	28	15	0	86	1	2	66	15	4	21	1	0	85	59	11	1500	0
JACKSON HOLE, WYO	44	213	3	31	15	7	5	0	38	6	1	39	0	4	13	0	0	43	5	0	500	0
SNOWBIRD, UTAH	67	219	3	31	43	12	11	1	61	6	0	66	0	1	21	1	0	52	16	6	2500	1
SOLITUDE, UTAH	26	92	3	31	12	12	9	0	24	2	2	24	0	0	25	4	1	26	9	0	800+	0
TETON PASS, WYO 22	7	18	3	8	5	8	3	0	6	1	0	4	0	3	2	0	0	6	2	1	1600	0
WEST COAST																						
ALPINE MEADOWS, CAL	253	725	5	28	99	6	7	0	255	0	1	253	0	1	39	2	0	181	26	1	1000	1
ALYESKA, ALASKA	96	252	2	27	18	16	13	0	91	5	7	86	0	3	63	13	6	95	84	38	2100+	0
CRYSTAL MTN, WASH	123	289	5	30	48	23	7	1	123	0	0	108	1	14	1	0	0	120	26	0	900	0
EAGLECREST, ALASKA	13	47	2	9	11	2	3	1	13	0	0	13	0	0	5	1	0	7	0	0	300	0
JUNE MOUNTAIN, CALIF	10	19	6	27	5	27	3	0	9	1	0	10	0	0	1	0	0	1	0	0	250	0
KIRKWOOD MOWS, CAL	59	222	2	28	26	28	9	0	57	2	8	49	0	2	25	3	0	57	30	3	1300+	0
MAMMOTH MTN, CALIF	110	218	2	28	25	28	6	0	104	6	0	110	0	0	22	6	1	95	31	1	1100	0
MT. HOOD MEADOWS	61	219	4	28	19	27	8	0	61	0	3	51	0	7	7	0	0	33	4	0	550	0
MT. RAINIER, WASH	10	30	23	31	6	30	3	0	0	10	5	1	0	4	3	1	1	2	0	0	300	5
MT ROSE/SLIDE MT, NV	69	154	2	28	22	6	8	1	68	1	0	63	4	2	35	4	2	53	29	5	1100+	5
SNOQUALMIE PASS I-90	35	131	4	31	11	23	8	3	20	15	0	16	0	19	0	0	0	0	0	0	0	1
SQUAW VALLEY, CALIF	95	297	5	28	24	7+	6	1	98	5	0	95	0	0	25	5	1	71	8	1	1100	0
STEVENS PASS U.S. 2	29	128	23	31	9	30	5	0	16	10	0	12	9	5	0	0	0	26	25	6	1200	11
SUGAR BOWL, CALIF	13	53	5	28	6	6	6	0	19	0	0	19	0	0	7	0	0	17	1	0	500	0

--=DATA INCOMPLETE OR MISSING
GE=GREATER THAN OR EQUAL TO
+=ALSO OCCURRED ON OTHER DATES